

APPENDIX E: TABLE 1
REGIONAL NPS PROBLEMS BY MANAGEMENT MEASURE CATEGORY
(Pollutants Impairing or Threatening Beneficial Uses)

Watershed/Waterbody	Agriculture	Forestry	Urban	Marinas & Recreational Boating	Hydro-Modification	Wetlands & Veg. Treatment Systems
A. 303(d) Listed Waters						
Anaheim Bay, Huntington Harbour, Bolsa Chica						
Anaheim Bay (180 acres)	Pesticides		Metals Pesticides	Metals		
Huntington Harbour (150 acres)			Metals Pathogens	Metals Pathogens		
Big Bear Lake						
Big Bear Lake (2970 acres)			Metals, Noxious aquatic weeds, Nutrients, Siltation	Metals	Nutrients, Siltation	
Knickerbocker Creek (2 miles)			Metals Pathogens			
Rathbone (Rathbun) Creek (2 miles)			Nutrients Siltation		Nutrients, Siltation	
Grout Creek (2 miles)			Metals Nutrients			
Summit Creek (2 miles)			Nutrients			
Lake Elsinore, San Jacinto River						
Lake Elsinore (3300 acres)	Nutrients, Low D.O. Siltation, Unknown Toxicity		Siltation Unknown Toxicity			
Canyon Lake (600 acres)	Nutrients Pathogens		Nutrients Pathogens			
Fulmor Lake (9 acres)			Pathogens			
Newport Bay WMA						
Lower Newport Bay (700 acres)	Nutrients Pesticides Toxics		Metals, Toxics Pesticides, Nutrients, Pathogens	Metals Toxics Pathogens		
Upper Newport Bay (752 acres)	Pesticides, Nutrients Siltation		Metals, Nutrients Pathogens, Siltation		Siltation Nutrients	
San Diego Creek, Reach 1 (6 miles)	Pesticides, Nutrients Siltation		Pesticides, Nutrients Siltation, Metals		Siltation Nutrients	
San Diego Creek, Reach 2 (6 miles)	Nutrients Siltation		Metals, Nutrients Siltation		Siltation Nutrients	
Chino Basin WMA						
Santa Ana River, Reach 3 (3 miles)	Nutrients, Pathogens TDS/Salinity Chloride		Nutrients Pathogens			
Mill Creek (Prado Area) (4 miles)	Pathogens Nutrients Susp. Solids		Pathogens			
Chino Creek, Reach 1 (2 miles)	Nutrients Pathogens		Pathogens			
Chino Creek, Reach 2 (10 miles)			High Coliform			
Cucamonga Creek, Valley Reach (13 miles)			High Coliform			
Prado Park Lake (60 acres)	Nutrients Pathogens		Nutrients Pathogens			
Upper Santa Ana River WMA						
Lytle Creek (18 miles)			Pathogens			
Mill Creek, Reach 1 (5 miles)			Pathogens			
Mill Creek, Reach 2 (8 miles)			Pathogens			
Mt. Home Creek (4 miles)			Pathogens			
Mt. Home Creek, East Fork (1 mile)			Pathogens			
Middle Santa Ana River WMA						
Santa Ana River, Reach 4 (12 miles)	Pathogens		Pathogens			
Lower Santa Ana River WMA						
Santiago Creek, Reach 4			TDS/Salinity			

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(2 miles)			Chloride			
Silverado Creek (2 miles)	Pathogens		TDS/Salinity Chloride			
Coyote Creek & Carbon Creek WMA						
Coyote Creek			Nutrients, sediments, pathoigens			
Carbon Creek			Nutrients, sediments, pathoigens			
B. Impaired Groundwater Basins						
Chino Groundwater Basins						
Chino II (104 mi ²)	TDS/Salinity/Chloride Nitrogen, DBCP		PCE, TCE			
Chino III (104 mi ²)	TDS/Salinity/Chloride Nitrogen					
Middle Santa Ana River Groundwater Basins						
Bunker Hill I (23 mi ²)	Nitrogen		PCE, TCE			
Bunker Hill II (77 mi ²)	TDS/Salinity/Chloride Nitrogen, DBCP		PCE, TCE			
Bunker Hill Pressure (24 mi ²)	TDS/Salinity/Chloride Nitrogen, DBCP		PCE, TCE			
Colton (14 mi ²)	TDS/Salinity/Chloride Nitrogen		TCE			
Perris North (37 mi ²)			TCE			
Rialto (32 mi ²)	TDS/Salinity/Chloride Nitrogen		PCE, TCE			
Riverside I (17 mi ²)	TDS/Salinity/Chloride Nitrogen		Pesticides, TCE			
Riverside II (11 mi ²)	TDS/Salinity/Chloride Nitrogen		Pesticides, PCE, TCE, DCE			
Riverside III (14 mi ²)	TDS/Salinity/Chloride Nitrogen					
Temescal (22 mi ²)	TDS/Salinity/Chloride Nitrogen					
Orange County Groundwater Basins						
Irvine Forebay I & II (32 mi ²)	TDS/Salinity/ Chloride, Nitrogen		DCE, DCA, TCE, benzene, pesticides			
Irvine Pressure (39 mi ²)			VOCs			
Santa Ana Forebay (105 mi ²)	TDS/Salinity/Chloride Nitrogen		TOC, PCE, TCE			
Santa Ana Pressure (139 mi ²)	TDS/Salinity/Chloride Nitrogen, TOC		Fuels, Organics			
C. Regional High Quality Waters						
Coastal Shorelines						
Bolsa Chica State Beach (7 miles)			Pathogens, metals, sediments			
Corona del Mar State Beach (1 mile)			Pathogens, metals, sediments			
Huntington Beach State Park (3 miles)			Pathogens, metals, sediments			
Newport Beach (6 miles)			Pathogens, metals, sediments			
Seal Beach (1 mile)			Pathogens, metals, sediments			
Sunset Beach (3 miles)			Pathogens, metals, sediments			
Ocean/Open Bays						
Irvine Coast Refuge (1,024 acres)			Pathogens	Pathogens,		

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Watershed/Waterbody	Agriculture	Forestry	Urban	Marinas & Recreational Boating	Hydro-Modification	Wetlands & Veg. Treatment Systems
				oil grease, fuel		
Newport Beach Refuge (166 acres)			Pathogens, metals, sediments	Pathogens, oil grease, fuel		
Lakes/Reservoirs						
Anaheim Lake (5 acres)						
Baldwin Lake (1,100 acres)			TDS/Salinity, Chloride			
Lake Hemet (470 acres)			Pathogens	Pathogens, oil grease, fuel		
Irvine Lake (650 acres)	Nutrients		Pathogens			
Jenks Lake (9 acres)						
Lake Matthews (2750 acres)			Pathogens, metals, sediments			
Lake Perris (xxxx acres)			Pathogens, oil and grease, fuel			
Rivers/Streams						
Mill Creek, Reach 1 (5 miles)			Pathogens, metals, sediments			
Mill Creek, Reach 2 (8 miles)			Pathogens			
Plunge Creek (5 miles)			Pathogens			
Santa Ana River, Reach 3 (15 miles)			Pathogens, nitrogen, TDS/Salinity, Chloride			
Santiago Creek, Reach 3 (6 miles)			Pathogens, nitrogen, TDS/Salinity, Chloride			
Shay Creek (1 mile)			Pathogens, sediments			
Wetlands/Freshwater						
San Joaquin Freshwater Marsh (400 acres)			TDS/Salinity, Chloride, metals, pathogens, sediments			

APPENDIX E: TABLE 2A
NON-POINT SOURCE (NPS) PROGRAM SHORT TERM OBJECTIVES

Goal 1 – Implement, track and monitor priority Management Measures (MMs) to identify, prevent, and reduce NPS pollution

Goal 2 – Develop new TMDLs

Goal 3 – Implement and track effectiveness of TMDLs developed to date

Goal 4 – Increase education/outreach programs, including volunteer monitoring and outreach for 319(h) grants

Goal 5 – Increase awareness of NPS issues in project planning stages (CEQA, 401 certifications) to incorporate methods for NPS prevention and reduction into new projects

APPENDIX E: TABLE 2A – NPS SHORT TERM OBJECTIVES

Objective	Goal	2002	2003	2004	2005	2006	Management Measures
Develop & implement TMDLs for 303(d) listed waters – Newport Bay and tributaries, Big Bear Lake, Lake Elsinore, Newport Coast streams.	2,3	X	X	X	X	X	1A,C
Conduct surface & groundwater quality monitoring to assess current & historic dairy waste impacts.	1	X	X				1B
Develop and implement manure removal strategies – Chino Basin, San Jacinto WS.	1	X	X	X	X	X	1B
Work w/USEPA and NRCS to develop the joint unified Animal Feeding Operations National Strategy. Target EQIP funding through participation on the State Technical Committee.	1	X	X	X	X	X	1B
Work w/USEPA and NRCS on implementation of the joint unified Animal Feeding Operations National Strategy. Target EQIP funding through participation on the State Technical Committee.	1	X	X	X	X	X	1B
Implement and enforce updated general dairy NPDES permit.	1	X	X	X	X	X	1B
Increase number of inspections of dischargers known to be in violation of water quality standards.	1	X	X	X	X	X	1B
Develop regional numeric nutrient criteria in cooperation with USEPA, RWQCBs, and Nutrient Criteria Team – Newport Bay WS.	2	X	X	X			1C
Develop & implement agriculture nutrient management plans.	1,3	X	X	X	X	X	1C
Implement nutrient monitoring program to evaluate TMDL	1,3	X	X	X	X	X	1C

APPENDIX E: TABLE 2A – NPS SHORT TERM OBJECTIVES

Objective	Goal	2002	2003	2004	2005	2006	Management Measures
compliance – Newport Bay WS.							
Update commercial nurseries WDRs for nutrients.	1,3	X	X				1C
Identify pesticide impairment to water quality standards; develop effective pesticide control program through TMDL development and implementation – Newport Bay WS.	1,2	X	X				1D
Prevent and mitigate threats to water quality from pesticides through coordination and implementation of the MAA and Pesticide WQMP with the CDPR.	1,2	X	X	X	X	X	1D
Review the red imported fire ant control/eradication program in Southern California in coordination with DFA, CDPR and RWQCBs.	1,2	X	X				1D
Prevent aquatic toxicity from organophosphate pesticide residues through voluntary monitoring efforts – Newport Bay WS.	1,2	X	X	X	X	X	1D
Reduce pesticides in agricultural and urban surface water through promotion of BMPs that reduce pesticide residues in runoff and through CDPR's registration process. Address impacts through self-regulation and regulatory action– Newport Bay WS.	1,2	X	X	X	X	X	1D
Coordinate water quality sampling program for red fire ant eradication program – Newport Bay WS.	1,2	X	X	X	X	X	1D
Work with CDPR and RWQCBs to target funds for monitoring for TMDL development.	2	X	X				1D
Coordinate TMDL unit work w/stakeholders to document levels of use & associated impacts to beneficial uses – Newport Bay WS.	2	X	X	X	X	X	1C; 3.4A,B
Incorporate applicable MMs into NPDES permits.	1	X	X	X	X	X	3.1A,B,C
Incorporate applicable MMs into Urban TMDL development strategies and implementation plans.	1,2	X	X	X	X	X	3.1A,B,C
Assign or redirect SWRCB &/or RWQCB staffs to support OSDS activities.	1,4	X	X	X	X	X	3.1A,B,C
Provide technical assistance and oversight on OSDS siting and proper	1,4	X	X	X	X	X	3.4A,B

APPENDIX E: TABLE 2A – NPS SHORT TERM OBJECTIVES

Objective	Goal	2002	2003	2004	2005	2006	Management Measures
application of alternative technology.							
Provide technical assistance for assessing cumulative impacts of OSDS and aid local agencies in the development of procedures for addressing cumulative impacts.	1,4	X	X	X			3.4A,B
Develop and implement a program of OSDS inspection and certification to verify that systems are operating in a manner that protects water quality.	1	X	X	X	X	X	3.4A,B
Meet with Federal Highway Admin. (FHWA), Caltrans and local transportation agencies to include water quality issues in FHWA biannual Regional audits.	1	X	X	X			3.5
Coordinate and participate in training sessions, workshops, and community events.	1,4	X	X	X	X	X	3.6A
Compile existing data on water quality at marinas to identify levels and potential sources of priority pollutants/stressors (associated with recreational boating / vessel waste discharges and related operations).	1,2			X		X	4.1
Establish baseline water quality data at marinas – Lower Newport Bay, Anaheim Bay / Huntington Harbour, Big Bear Lake.	1,2,3	X	X				4.1
Assess effectiveness of current vessel sewage waste programs.	1	X	X				4.1G, 4.2F
Establish agreements regarding the lead or shared responsibility for inspection of pump-out facilities.	1	X	X				4.1G, 4.2F
Establish formal agreements between agencies on program-level issues to streamline permitting and better protect resources.	1	X	X	X	X	X	5.1, 6A,B,D
Coordinate wetlands-related projects with work of the Southern California Wetlands Recovery Project.	1	X	X	X	X	X	5.1, 6A,B,D
Participate in regional flood planning activities.	1	X	X	X	X	X	6A,B,D
Review the effectiveness of existing MMs in CCAs.	1,2	X	X		X	X	CCA
Identify and map CCA watersheds, including: - Areas of regional significance - Special coastal habitats that are not a	1	X	X	X			CCA

APPENDIX E: TABLE 2A – NPS SHORT TERM OBJECTIVES

Objective	Goal	2002	2003	2004	2005	2006	Management Measures
priority in other sections of this plan - Coastal & ocean waters threatened by reasonably foreseeable increases in pollution loading - Coastal & ocean waters not meeting water quality standards - Coastal & ocean waters designated to prohibit degradation of water quality - Pristine coastal waters							
Identify and implement applicable MMs to protect or restore water quality in coastal and ocean waters adjacent to CCAs.	1	X	X	X	X	X	CCA
Create CCA working groups to identify available resources and future needs.	1,4	X	X				CCA
Provide summaries of water quality and land use information for each identified CCA.	1	X		X		X	CCA
Provide information on CCA efforts to local, State, and regional decision-makers, regional review committee, and the public.	1,4	X		X		X	CCA
Update CCA list, maps, and watershed information every two years, and report on implementation efforts and committee meetings.	1	X		X		X	CCA
Develop and implement a monitoring strategy to assess effectiveness of BMPs in reducing NPS pollution.	1,2,3,4	X	X	X		X	Mon.
Promote education and foster use of management practices to reduce NPS impacts.	1,4	X	X	X	X	X	1G
Provide outreach within 319(h) projects.	4	X	X	X	X	X	1G
Conduct BMP workshops for local developers.	1,4	X	X	X	X	X	3.1
Develop urban pesticide control education program.	1,4	X	X	X	X	X	3.6A
Coordinate and participate in training sessions, workshops, and community events.	1,4	X	X	X	X	X	3.6A
Participate in Adopt-a-Watershed and other watershed-awareness activities in public schools.	1,4	X	X	X	X	X	3.6A

APPENDIX E -TABLE 2B
EDUCATION, OUTREACH, AND TECHNICAL ASSISTANCE

Target Audience	Education/Outreach/ Assistance Goals	Products	Staff or Contract	Management Measure Category
Regionwide				
Water Districts, Sanitation Districts, UC Extension, TMDL Groups	Promote education and foster the use of best management practices to reduce NPS impacts.	<ul style="list-style-type: none"> • Periodic meetings • Better use of BMPs by agencies and farmers 	CWA 319	Agriculture, 1g Urban, 3.6a
SAWA, SARDA Resource Conservation Districts California Coastal Commission Other stakeholder groups	Information sharing	<ul style="list-style-type: none"> • Periodic meetings • Better understanding of NPS issues, local concerns 	Staff	Agriculture, 1g Urban, 3.6a
Technical Advisory Committees Resource Conservation Districts	Outreach component within 319(h) projects.	<ul style="list-style-type: none"> • More proposals, • Better written proposals • Contract management 	CWA 319	Agriculture, 1g Urban, 3.6a
Local developers, construction companies, city and county staff	Conduct BMP workshops. Review and provide comments on CEQA projects	<ul style="list-style-type: none"> • Annual workshops • Better use of BMPs by developers 	Storm water	Urban, 3.1a,b,c Urban, 3.6a
Public schools Science museums	Participate in Adopt-a-Watershed and other watershed-awareness activities.	<ul style="list-style-type: none"> • Public school site visits • Science/Discovery center site visits • Scout troop visits 	NPS-PCA 436	Urban, 3.6a
Environmental Groups	<ul style="list-style-type: none"> - Assist in coordinating volunteer monitoring - Provide water quality status report - Coordinate development & distribution of educational materials 	<ul style="list-style-type: none"> • Periodic meetings 	Staff/Contract	Urban, 3.6a MM-Monitoring
CSU and Univ. of California	Promote NPS education through university-level teacher training programs	<ul style="list-style-type: none"> • Education/outreach • Grant applications • Classroom presentations 	Staff	Agriculture, 1g Forestry, 2l Urban, 3.6a, 4.3a Marinas, 4.3a Wetlands, 6d

APPENDIX E -TABLE 2B
EDUCATION, OUTREACH, AND TECHNICAL ASSISTANCE

Target Audience	Education/Outreach/ Assistance Goals	Products	Staff or Contract	Management Measure Category
Newport Bay Watershed Management Area				
Agricultural groups UC Extension	Coordinate with CFB, NRCS, agricultural groups, and educational institutions to evaluate BMPs for water quality improvements	<ul style="list-style-type: none"> Periodic meetings Project Final Report 	CWA 319	Agriculture, 1f
Orange County Residents and Businesses	Develop urban pesticide control education program.	<ul style="list-style-type: none"> Periodic meetings Public information brochures 	Staff	Urban, 3.6a
TMDL groups	Coordinate and participate in training sessions, workshops, and community events.	<ul style="list-style-type: none"> Periodic meetings 	Staff	Urban, 3.6a
Schools	Coordinate development of education program with Earth Resources Foundation, Newport Nautical Museum, et al., and Orange County Unified School District (County of Orange, City of Newport Beach, Surfride, Coastkeepers, UCI)	<ul style="list-style-type: none"> Periodic meetings Education/outreach 	Staff CWA 319h Prop 13	Urban, 3.1a, 3.6a Marinas, 4.3a Wetlands, 6d
Big Bear Area Watershed Management Area				
Big Bear Watershed Management Council	Coordinate with BBMWD, City of BB, EVRCD, CFG, SB County to deal with current & potential problems in Big Bear Lake	<ul style="list-style-type: none"> Periodic meetings Site visits 	Staff	Urban, 3.6a
Lake Elsinore/San Jacinto Watershed Management Area				
Lake Elsinore/San Jacinto Joint Powers Authority	Coordinate with City of LE, EMWD, EVMWD, WMWD, Rir. County, SAWPA	<ul style="list-style-type: none"> Periodic meetings Site visits 	Staff	Agriculture, 1f, 1g Urban, 3.6a
Anaheim Bay/Huntington Harbour/Bolsa Chica Watershed Management Area				
Huntington Beach Water Quality Issues Committee	Coordinate with Cities of Huntington Beach, Seal Beach, County of Orange, U.S. Navy, ACOE, CDF, Environmental groups, OC Environmental Health, OCPFRD, Harbor Patrol	<ul style="list-style-type: none"> Quarterly meetings 	Staff	Urban, 3.1a, 3.6a Marinas, 4.1a,b,e,g Wetlands, 6a,b,d Hydro-modification 5.1a
Bolsa Chica Technical Committee	Arbitrator for clean-up goals	<ul style="list-style-type: none"> Periodic meetings 	Staff and Contract	Wetlands, 6B

**APPENDIX E -TABLE 3
WAIVERS OF WASTE DISCHARGE**

Waiver No./Name/Description	Management Measures	Review Schedule
97-15/Pima Gro/biosolids application	Ag. general	no review required
93-30/Bio Gro/biosolids application	Ag. general	no review required

Notes:

1. In addition to the waivers listed in Table 3, approximately 50 waivers are issued annually under Resolution 96-9 which waives discharge requirements for specific types of discharges provided that certain conditions are met. Resolution 96-9 was adopted by the Regional Board in March 1996.
2. Riverside County has effectively banned land application of Class B biosolids as of 11/25/2001

**APPENDIX E - TABLE 4
KEY PARTNERS**

Existing or Potential Partner Agency	Agreement Type	Management Measures
Big Bear Watershed Management Council		3.1A,B,C, 3.6A, 5.1A,B, 5.3A, 5.4A, 6A,B,D
California Department of Pesticide Regulation (CDPR)	Pesticide Management Plan for Water Quality (MAA)	1D, 3.6A
California Department of Health Services (DHS)	MOU	3.1A, 3.3A
Chino Basin Watermaster		
Chino Basin TMDL Workgroup		
Milk Producers Council (MPC) and Western United Dairymen		1B, 1G
Natural Resource Conservation Service (NRCS)	EWMPs for Dairies	1B, 1G
Newport Bay Watershed Management Committee		
Santa Ana River Watershed Group		6A, 6B
Santa Ana Watershed Project Authority (SAWPA)		
Santa Ana Watershed Association of Resource Conservation Districts (SAWA)		1G, 3.6A, 6A, 6B
Southern California Caulerpa Action Team (SCCAT)		3.3A, 4.1A, 4.3A
Southern California Coastal Water Research Project (SCCWRP)		
University of California Cooperative Extension (UC-Coop)	Project contracts	
Underground Storage Tanks – Local Oversight Program (UST-LOP)		
US Army Corps of Engineers	401, 404 permitting	5.1A, 5.1B, 6A
Counties:		
Orange Co. Public Facilities and Recreation Dept.		1C, 1G
Orange Co. Water District		
Orange Co. Health Care Agency		
Riverside Co. Dept. of Environmental Health Services		
San Bernardino Co. Dept. of Environmental Health Services		

EWMP = Engineered Waste Management Plan

MAA = Management Agency Agreement

MOU = Memorandum of Understanding

TMDL = Total Maximum Daily Load

**APPENDIX E -TABLE 5
PROPOSED FY 02-03 NPS RESOURCE ALLOCATION**

No.	Task	Product	Management Measure (MM)	Funding Source	Cost
	Nonpoint Source Coordination				
1	Finalize the NPS compliance assistance guidance	Final NPS compliance assistance guidance		319	
2	Participate on the NPS Interagency Coordinating Committee (IACC)	Participate in bimonthly IACC meetings and selected technical advisory committees (TACs)		319	
3	Participate at quarterly NPS Program Roundtables and monthly conference calls	Develop and receive technical and program support through roundtables. Examples of issues to be considered include information exchange on 319(h) project successes and mechanisms to improve NPS Program Plan implementation.		319	
4	Report progress on NPS activities	Develop semi-annual progress report on 319(h) activities for 01/02-06/02 Develop semi-annual progress report on 319(h) activities for 07/02-12/02		319	
5	Develop annual workplan	Assess NPS Program needs and develop workplan for FY 03-04		319	
6	Assist in the second annual California NPS Conference	Coordinate with project managers on presentations and posters		319	
7	Assist in the request for proposals process	Develop the project selection list from FFY 2003 RFP Assist in preparing the FFY 2004 RFP and provide outreach Conduct regional RFP workshops Assist project proponents with their proposals and initiate proposal review associated with FFY 2004 RFP		96 Bond	
8	Participate in the Critical Coastal Areas (CCAs) committee	Participate in development of initial list of CCAs where targeted implementation of management measures will occur		319	
	Total		1G,3,6,4,3,5,4,6D		0.7 PY
	Education/Outreach				
1	Update Contact List	Updated database of stakeholders, RCDs, environmental groups, etc Disburse electronic database information		319	
2	Update Brochures/Pamphlets	Collect, organize, evaluate various educational/outreach materials pertaining to all NPS management measures. Distribute relevant material as requested/needed. Update or create new brochures/pamphlets/fact sheets pertaining to current NPS concerns		319	
3	NPS Web-site	Update NPS portion of our website to include RFP announcements, access fact sheets (as they become available), post regional events, etc.		319	
4	Workshops/Meetings	Coordinate stakeholder outreach meetings Meet with each counties (Orange, Riverside, and San Bernardino) NPDES education subcommittee Coordinate and/or participate in training sessions, workshops, and community events (i.e. Calif. Environmental		319	

**APPENDIX E -TABLE 5
PROPOSED FY 02-03 NPS RESOURCE ALLOCATION**

No.	Task	Product	Management Measure (MM)	Funding Source	Cost
		Education Master Plan, Clean Harbor Day, Earth Day, Coastal Clean-up Day, etc.)			
		Assist in developing 2 nd Annual Regional NPS Workshop			
5	Coordinate with other units	On a quarterly basis, coordinate with planning, stormwater, and dairies.		319	
	Total		1G,3.6,4.3,5.4,6D		0.5 PY
	Contract Management				
1	Big Bear Lake/Rathbun Creek Sedimentation and nutrient Control Project/East Valley RCD	<ol style="list-style-type: none"> 1. Project Design 2. Basin Construction 3. Project Report Will improve water quality by reducing sediments and nutrients from entering Big Bear Lake.		DWQ	0.1 PY
2	Grove Avenue Detention Basin/Chino Basin Water Conservation District	<ol style="list-style-type: none"> 1. Implement education/outreach program. 2. Construct water conservation structure. Upgrade the Grove Ave. detention basin to improve stormwater retention capacity, groundwater recharge, and runoff protection for the dairy area.			0.1 PY
3	Dairy Washwater Treatment Demo Project/Orange County Water District	<ol style="list-style-type: none"> 1. Conduct field days to showcase sites. 2. Prepare responsiveness summaries. 3. Technology transfer/installation assistance 4. Refine facility operation 5. Monitor treatment process Implement an alternative treatment demonstration project for dairy washwater. A constructed wetlands system is used to evaluate reduction of contaminants in dairy washwater.			0.1 PY
4	San Diego Creek Watershed Agricultural Nutrient Management Plan/UC Extension with Orange County Farm Bureau	<ol style="list-style-type: none"> 1. Monitoring program 2. BMP education and implementation 3. TMDL update 			0.1 PY
5	Urban Runoff Nutrient Reduction Program/Municipal Water District of Orange County	Site selection, education, and installation of Et controllers Customer service Monitoring program TMDL update			0.1 PY
6	Santa Ana Watershed Volunteer Monitoring and Public Outreach Project/Orange County CoastKeeper	Work with school-aged individuals on citizen monitoring Provide public outreach information			0.1 PY
7	Newport Bay Toxics TMDL				
8	Riverside County Flood Control	Stream gauging station maintenance in San Jacinto Watershed		DWQ	0.1 PY
9	Lake Elsinore Toxicity TMDL	Verify toxicity listing of Lake Elsinore		DWQ	0.1 PY
10	TMDL Workgroup facilitation	Workgroup facilitation			
11	City of Newport Beach	Determine Sources of Bacteriological contamination at beaches in Newport Beach		401.01	
12	Public outreach project	To conduct community outreach and education		319(h)	
13	UC Riverside	TMDL development in Canyon Lake		DWQ	
14	UC Regents	Study of nutrient cycles of Lake Elsinore		DWQ	

APPENDIX E - TABLE 6
NPS RESOURCE NEEDS: FY 2002/03 - FY 2004/05

No.	Task	Product	Management Measure	State Fiscal Year			Cost
				02/03	03/04	04/05	
	Regionwide						
1	Develop region-specific GIS data layers	GIS maps, data assessment	---	X	X	X	1 PY
2	Identify and implement applicable MMs to protect or restore water quality in coastal and ocean waters adjacent to CCAs	Better protection of CCAs	CCA	X	X	X	0.3 PY
3	Create CCA workgroups to identify available resources and future needs	Better protection of CCAs	CCA	X	X	X	0.3 PY
4	Provide summaries of water quality and land use information for each identified CCA	Monitoring of CCAs	CCA	X	X	X	0.3 PY
5	Provide information on CCA efforts to local, state, and regional stakeholders and the public	Increased agency cooperation	CCA	X	X	X	0.1 PY
6	Develop and implement strategy to monitor BMP effectiveness	Water quality monitoring data	Monitoring	X	X	X	1 PY
7	Provide technical assistance and oversight on siting and proper application of alternative technology for OSDSs	OSDS technical assistance	3.4 A,B	X	X	X	0.1 PY
8	Develop and implement program for annual inspection and certification of OSDSs	OSDS inspection program	3.4 A,B	X	X	X	0.4 PY
9	Coordinate with FHWA, Caltrans, and local transportation agencies to include water quality issues in FHWA biannual regional audits	NPS education	3.5	X	X	X	0.1 PY
10	Establish baseline water quality data at marinas	Water quality assessment	4.1	X	X	X	0.5 PY
11	In public schools, participate in Adopt-a-Watershed and other watershed-awareness activities	NPS education	3.6A	X	X	X	1 PY
12	Oversee Regional CWA 319(h) contracts	Contract Management	---	X	X	X	1.2 PY
13	Incorporate applicable MMs into NPDES permits	Implement MMs into permits	3.1A,B,C	X	X	X	0.2 PY
14	Incorporate applicable MMs into Urban TMDL implementation plans	Urban TMDL implementation strategies	3.1A,B,C	X	X	X	0.2 PY
15	Assess effectiveness of current vessel sewage waste programs	Vessel waste program assessment	4.1G,4.2F	X	X	X	0.3 PY
16	Review the effectiveness of existing MMs in CCAs	Better Protection of CCAs	CCA	X	X	X	0.3 PY
17	Develop and implement a monitoring strategy to monitor effectiveness of BMPs in reducing NPS pollution	Water quality monitoring data	Monitoring	X	X	X	1 PY
18	Coordinate and participate in training sessions, workshops, and community events	NPS education	3.6A	X	X	X	0.3 PY
19	Provide outreach to potential NPS grant applicants	Improved grant proposal	1G	X	X	X	0.2 PY
20	Work w/USEPA and NRCS to develop & implementation of the joint unified Animal Feeding Operations National Strategy. Target EQIP funding to needed projects through participation on the State Technical Committee	CAFO Strategy	1B	X	X	X	0.3 PY
21	Assign or redirect SWRCB&/or RWQCB staffs to support OSDS activities	Increased OSDS support	3.1A,B, C	X	X	X	0.2 PY
22	Establish agreements to manage inspection of pump-out facilities	Establish and review agreements	4.1G, 4.2F	X	X	X	0.2 PY

APPENDIX E - TABLE 6
NPS RESOURCE NEEDS: FY 2002/03 - FY 2004/05

No.	Task	Product	Management Measure	State Fiscal Year			Cost
				02/03	03/04	04/05	
23	Establish and maintain agreements between agencies on regional-level issues	Establish and review agreements	5.1,6A,B,D	X	X	X	0.4 PY
24	Coordinate wetlands-related projects in Southern California with work of the Wetlands Recovery project	Increased agency cooperation	5.1, 6A,B,D	X	X	X	0.2 PY
25	Promote education and foster the use of management practices to reduce NPS impacts to water quality	NPS education	1G	X	X	X	0.3 PY
26	Develop regional numeric nutrient criteria in cooperation with USEPA, RWQCBs, and Nutrient Criteria Team	Nutrient criteria for ecoregions	1C	X	X	X	0.5 PY
27	Conduct water quality field camps with La Jolla Indian Reservation schools	Education	1G, 3.6A	X	X	X	0.1 PY
28	NPS workplan management	Annual NPS workplan	---	X	X	X	0.2 PY
29	WMI NPS section update	Annual WMI update	---	X	X	X	0.1 PY
	Watersheds						
	Chino Basin						
1	Manage new CWA 319h and Prop 13 Contracts	Data assessment	Monitoring	X	X	X	1 PY
		Data assessment	1A, 3.3A	X	X	X	1 PY
2	Develop manure removal strategies	Manure removal strategies	1B	X	X	X	0.3 PY
3	Conduct surface & groundwater quality monitoring to assess current & historic dairy waste impacts	Monitoring data for dairies	1B	X	X	X	0.5 PY
4	Manage CWA 319(h) contract for Grove Avenue Detention Basin	Data assessment		X	X	X	0.1 PY
5	Manage new CWA 319h and Prop 13 Contracts	Computer modeling		X	X	X	1 PY
		Monitoring	Monitoring		X	X	1 PY
1	Newport Bay	Dredging	1A, 3.1A, 3.3A, 5.3A	X	X		0.2 PY
2	Perform modeling simulations using existing numerical model to evaluate fate and transport of sediment and other pollutants in Newport Bay		1A, 1D, 1F, 3.1, 3.2A, 3.6, 5.3A	X	X	X	2 PY
3	Investigate management measures for control of NPS selenium	Monitoring strategy	1D, 3.3A, 3.6A		X	X	0.1 PY
4	Oversee dredging project in Newport Bay	Contract management	---	X	X	X	0.5 PY
5	Implement Toxics TMDL	Education/Monitoring	---	X	X	X	0.2 PY
6	Implement Nutrient TMDL						
	a)manage CWA 319(h) project to provide data for review of San Diego Creek WQOs	Site-specific nutrient/algae data	Data assessment	X	X	X	0.1 PY
	b)Oversee implementation of County's nutrient monitoring program to evaluate TMDL compliance	Nutrient monitoring through TMDL	Monitoring, 3.1,3.2,3.3	X	X	X	0.2 PY
	c)Manage CWA 319(h) project to evaluate water quality benefits from better management of residential landscape irrigation	BMP evaluation, monitoring data	3.3A	X	X	X	0.1 PY
	d)Manage CWA 319(h) project to implement agriculture nutrient management plan, and evaluate BMPs	BMP evaluation, monitoring data	1C	X	X	X	0.1 PY

APPENDIX E - TABLE 6
NPS RESOURCE NEEDS: FY 2002/03 - FY 2004/05

No.	Task	Product	Management Measure	State Fiscal Year			Cost
				02/03	03/04	04/05	
	e)Review Tier III measures for implementation of nutrient TMDL	Updated nursery WDRs	1C	X	X	X	0.25 PY
7	Implement Sediment TMDL						
	a)Manage program to enhance in-channel sediment basins in lower San Diego Creek	Renovated sediment-trapping basins	1A, 3.1,3.2,3.3	X	X	X	0.1 PY
	b)Manage stream-bank stabilization project for Serrano Creek and participate in Serrano Creek workgroup meetings	Stream restoration	5.3A	X	X	X	0.2 PY
	c)Review annual sediment report from county	Annual Report	Monitoring	X	X	X	0.1 PY
	d)Oversee sediment dredging project in Newport Bay	Project design report	1A, 3.1,3.2,3.3	X	X	X	0.1 PY
8	Implement Fecal Coliform TMDL						
	a)Participate in recreational use surveys program	Project report	---	X	X	X	0.1 PY
	b)Monitor stormwater and public health data for exceedances	Data Review	Monitoring	X	X	X	0.1 PY
	c)Manage contract to evaluate appropriate bacteriological indicators	Project Reports	---	X	X	X	0.2 PY
9	Implement Selenium TMDL						
	a)Manage contracts to quantify NPS resources	Monitoring data	Monitoring	X	X	X	0.1 PY
	b)Manage contract to investigate sediment toxicity and fish bioaccumulation in Newport Bay, and perform toxicity studies in San Diego Creek	Site-specific toxicity and bioaccumulation data	Monitoring	X	X	X	0.1 PY
	c)Provide oversight on IRWDs Natural Treatment System project	Project design	Monitoring, 1A, 1C, 3.1,3.2,3.3	X	X	X	0.1 PY
10	Implement Diazinon and Chlorpyrifos TMDL						
	a)Oversee inclusion of pesticides in County's regional monitoring program for the watershed	Pesticide monitoring program	Monitoring 1D	X	X	X	0.1 PY
	b)Monitor CDPR pesticide data collected from IRWD residential runoff study	Water quality data review	Monitoring 1D	X	X	X	0.1 PY
	c)Monitor and review CDPR/CDFA water quality sampling program for pesticides used in fire ant eradication program	Project design	Monitoring, 1D	X	X	X	0.1 PY
11	Participate in Newport Bay Watershed Management committee	Monthly meetings	1B, 3.6A	X	X	X	0.2 PY
1	Lake Elsinore/San Jacinto		1C, 3.1A, 3.2A, 3.3A		X	X	0.5 PY
2	Revise water quality model for Lake Elsinore and Canyon Lake and perform simulations for nutrients and pathogens		1A, 1B, 3.1A, 3.2A, 3.3A		X	X	0.2 PY
3	Continue watershed monitoring		1A, 3.1, 3.2		X	X	0.2 PY
4	Implement nutrient TMDL	Contract management	---	X	X	X	0.4 PY
	Implement pathogen TMDL						
	Implement sediment TMDL						
5	Manage 4 new CWA 319h contracts	Contract management	---		X	X	0.2 PY
		Education, outreach	3.1A, 3.6A, 6D	X	X	X	0.1 PY
6	Manage CWA 319(h) contract to install and maintain stream gaging stations	Stream gaging stations	Monitoring	X	X	X	0.1 PY

APPENDIX E - TABLE 6
NPS RESOURCE NEEDS: FY 2002/03 - FY 2004/05

No.	Task	Product	Management Measure	State Fiscal Year			Cost
				02/03	03/04	04/05	
7	Manage contract to collect pathogen monitoring data in Canyon Lake	Monitoring Data	Monitoring	X	X	X	0.1 PY
8	Manage CWA 205j contract to model and assess nutrient inputs to Lake Elsinore	Source Assessment	Monitoring	X	X	X	0.1 PY
9	Manage contract to investigate nutrient cycling in Lake Elsinore and Canyon Lake	Nutrient data monitoring	Monitoring	X	X	X	0.1 PY
10	Manage prop 13 contract to develop watershed management plan for the San Jacinto Watershed	Watershed Management Plan	1G, 3.6A	X	X	X	0.1 PY
11	Participate in JPA Technical Advisory committee meetings	Monthly Meetings	1G, 3.6A	X	X	X	0.1 PY
12	Manage San Jacinto Watershed TMDL workgroup	Monthly Meetings	1G, 3.6A	X	X	X	0.2 PY
13	Work with flood control district to process stormwater quality data	Data Assessment	Monitoring	X	X	X	0.2 PY
	Anaheim Bay, Huntington Harbor, Bolsa Chica						
	Manage new CWA 319h and Prop 13 contracts						
1	Develop watershed-specific education program			X	X	X	0.3 PY
				X	X	X	0.5 PY
2	Participate in Huntington Beach Water Quality Committee	Quarterly Meetings	3.6A	X	X	X	0.05 PY
3	Manage Caulerpa Eradication Program	Surveillance, Eradication, Monitoring	3.6A, 4.3A	X	X	X	0.2 PY
4	Participate in Bolsa Chica Technical Committee	Arbitrate cleanup goals	6B	X	X	X	0.2 PY
5	Participate in Beach Water Quality Group – monitoring subcommittee	Improve beach water quality	3.1A, 3.6A	X	X	X	0.1 PY
1	Big Bear			X	X	X	0.1 PY
2	Manage new and continuing CWA 319h and Prop 13 contracts						
3	Develop and implement water quality model						
4	Coordinate volunteer monitoring program						
5	Manage CWA 319(h) contract to eliminate noxious aquatic weeds using herbicides	Mitigate lake eutrophication	3.1A, 5.3A	X	X	X	0.1 PY
6	Manage CWA 319(h) contract to restore Rathbun Creek/Sand Canyon	Mitigate lake eutrophication	5.3A	X	X	X	0.1 PY
7	Participate in Big Bear Watershed Management Council	Monthly meetings	3.6A	X	X	X	0.1 PY
8	Manage nutrient monitoring contract	Monitoring	Monitoring	X	X	X	0.1 PY
9	Manage contract to create database, determine lake hydrologic budget, and model nutrient dynamics and in-lake nutrient cycling	Data Assessment	Monitoring	X	X	X	0.2 PY
	Upper Santa Ana River						
	(no watershed-specific NPS activities in FY 02/03)						
	Middle Santa Ana River						
	(no watershed-specific NPS activities in FY 02/03)						
	Lower Santa Ana River						

APPENDIX E - TABLE 6
NPS RESOURCE NEEDS: FY 2002/03 - FY 2004/05

No.	Task	Product	Management Measure	State Fiscal Year			Cost
				02/ 03	03/ 04	04/ 05	
	(no watershed-specific NPS activities in FY 02/03)						
	Newport Coast						
1	Manage contract for restoration of Buck Gully	Stream Restoration	5.3A, 5.4,6A, 6D	X	X	X	0.1 PY
2	Participate in harbor water quality meetings	Monthly meetings	3.6A, 4.3A	X	X	X	0.1 PY
3	Participate in Coastal Coalition activities	Monthly meetings	3.6A	X	X	X	0.1 PY
	Coyote Creek & Carbon Creek						
1	Manage Prop 13 contract to develop watershed management plan for the Coyote Creek Watershed	Watershed management plan	1G, 3.6A	X	X	X	0.1 PY